

What is claimed is:

1. A method of communicating live audio/visual information over a communications link, comprising:

encoding, segment by segment, frames of audio/video data, including a number of pixels each having a plurality of pixel color components by creating a frame group table of encoded pixel values in which each pixel entry includes a dominant pixel color component of the plurality of pixel color components;

determining a set of segment reference pixels for each encoded segment, wherein each one of the segment reference pixels is comprised of segment reference pixel parameter values and is a pixel within each one of the encoded segments having a most intense dominant pixel color value;

communicating the frame group table and the segment reference pixels over a network to a receiver; and

at the receiver, decoding the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels comprised of decoded pixel parameter values.

2. The method of claim 1, wherein each pixel entry further comprises at least one of luminance, chrominance, and color depth information.

3. The method of claim 2, further comprising scaling down each pixel parameter value prior to storing each pixel entry into the frame group table.

4. The method of claim 1, wherein the set of segment reference pixels comprises a representative red pixel, green pixel, blue pixel, and black pixel.

5. The method of claim 1, wherein prior to encoding the frame of audio/video data, creating a frame group file to store a header, the frame group table, and each set of segment reference pixels.
6. The method of claim 5, wherein after creating the frame group table, writing a pointer to a next frame group to the frame group file.
7. The method of claim 5, including storing audio data within the frame group file.
8. The method of claim 1, wherein determining the set of segment reference pixels includes comparing, on a pixel by pixel basis for each segment, a current pixel color value with a previously stored dominant pixel color value and storing the plurality of pixel color components and pixel parameters of the pixel with the most intense dominant pixel color component.
9. The method of claim 1, wherein the plurality of pixel color components comprises at least one of the sets of primary color components, red, green, and blue, or cyan, magenta, and yellow.
10. The method of claim 9, wherein the dominant pixel color components include red, green, blue, and black.
11. The method of claim 1, wherein an encoded segment is a row of pixels within the frame of audio/video data.
12. The method of claim 1, wherein creating a frame group table further comprises scaling down the dominant pixel color component.
13. The method of claim 1, wherein the set of the segment reference pixel values further comprises a dominant color pixel value, non-dominant pixel color values, and luminance and chrominance values.

14. The method of claim 1, wherein redundant encoded pixel values of the frame group table share common table entries.
15. The method of claim 14, wherein redundant encoded pixel values share identical dominant pixel color components and identical pixel parameter values.
16. The method of claim 14, wherein redundant encoded pixel values share dominant pixel color components and pixel parameters values that are similar to one another within a tolerance range.
17. The method of claim 14, wherein each one of the common table entries is decoded by recalling previously decoded pixel parameter values associated with each common table entry.
18. The method of claim 1, wherein scaling the set of segment reference pixel values comprises scaling the segment reference pixel's dominant color pixel value, and luminance and chrominance values.
19. The method of claim 1, wherein the table of encoded pixel parameter values further comprises non-dominant pixel color components.
20. The method of claim 19, wherein the set of segment reference pixels are comprised of full-scale pixel parameter values.
21. The method of claim 20, wherein scaling the set of segment reference pixel values further comprises scaling each of the full-scale pixel parameter values with the each corresponding encoded pixel parameter values.
22. The method of claim 1, further comprising synchronizing audio data associated with the table of encoded pixel parameter values.

23. The method of claim 1, wherein after scaling the set of segment reference pixel values according to each entry in the table of encoded pixel parameter values, communicating the decoded pixels to a playback device
24. The method of claim 23, further comprising communicating and synchronizing audio data to the playback device.
25. The method of claim 1, wherein the communications link is a low-bandwidth communications link.
26. A system, including:

an encoder to encode, segment by segment, frames of audio/video data, including a number of pixels each having a plurality of pixel color components by creating a frame group table of encoded pixel values in which each pixel entry includes a dominant pixel color component of the plurality of pixel color components and to determine a set of segment reference pixels for each encoded segment, wherein each one of the segment reference pixels is comprised of segment reference pixel parameter values and is a pixel within each one of the encoded segments having a most intense dominant pixel color value;

a server to communicate the frame group table and the segment reference pixels over a network to a receiver ; and

a decoder coupled to the receiver to decode the frame group table on a pixel-by-pixel basis by scaling the segment reference pixel parameter values according to each entry in the frame group table of encoded pixel parameter values to produce decoded pixels.